

In response to the office action of 10/1/04 please replace all prior versions of the claims with the following listing of claims:

CLAIMS

1 (previously amended). A handle section (1) of an electric dental cleaning or brushing device (1, 2), with a coupling section for coupling a brushing or cleaning tool (2) thereto, with a drive mechanism (23) for driving the coupled brushing or cleaning tool, and with a control device (27) for controlling the drive mechanism, wherein the control device (27) possesses an interlock device (100), for preventing operation of the drive mechanism, which is deactivatable by an interlock canceling element (7) provided on the brushing or cleaning tool, such that when the brushing or cleaning tool is coupled to the coupling section of the handle, the interlock cancelling element (7) is responsive to a first signal from the dental cleaning or brushing device (1, 2) to return a second signal receivable by the interlock device (100).

2(previously amended). The handle section as claimed in claim 1, wherein the interlock device (100) is deactivatable or deactivated by the interlock canceling element (7) when the brushing or cleaning tool is coupled to the handle section.

3(previously amended). A handle section (1) of an electric dental cleaning or brushing device (1, 2), with a coupling section for coupling a brushing or cleaning tool (2) thereto, with a drive mechanism (23) for driving the coupled brushing or cleaning tool, and with a control device (27) for controlling the drive mechanism, wherein the control device (27) possesses an interlock device (100) which is deactivatable by an interlock cancelling element (7) provided on the brushing or cleaning tool, wherein the control device (27) includes an

encoding detection device (5) for detecting an encoding of the interlock canceling element (7) of the coupled brushing or cleaning tool (2), and that the interlock device (100) is deactivatable in response to a signal from the encoding detection device (5).

4(previously amended). The handle section as claimed in claim 3, wherein a switch is provided on the handle section (1), said switch being an on-off switch of the drive mechanism (23), for activation of the encoding detection device (5), said drive mechanism (23) being adapted to be turned on upon a signal from the encoding detection device (5) or upon deactivation of the interlock device (100).

5(previously amended). The handle section as claimed in claim 1, wherein the interlock device (100) operates electronically.

6(previously amended). The handle section as claimed in claim 3, wherein the encoding detection device (5) is of the noncontacting type.

7(currently amended). The handle section as claimed in claim 3, ~~characterized in that~~ wherein the encoding detection device (5) is actuatable mechanically.

8(currently amended). The handle section as claimed in claim 7, ~~characterized in that~~ wherein the encoding detection device (5) includes at least one movable and/or elastically deformable sensing element (17) adapted to be moved and/or deformed by ~~an encoding of~~ the coupled brushing or cleaning tool (2), and produces a signal characteristic of ~~in particular~~ the movement and/or deformation.

9(currently amended). The handle section as claimed in claim 8, ~~characterized in that~~ wherein the sensing element (17) is constructed as an electrical contact member.

10(currently amended). The handle section as claimed in claim 3 ~~1~~, ~~characterized in that~~ wherein a probe element of the encoding detection device (5) is movably, preferably displaceably, mounted and has an engagement surface (56) for engagement with a corresponding actuating surface (55) of ~~a~~ the brushing or cleaning tool (2).

11(currently amended). The handle section as claimed in claim 10, ~~characterized in that~~ wherein the engagement surface mates with the actuating surface of the cleaning tool (2) such that on coupling engagement of the cleaning tool (2) with the ~~handle~~ coupling section the probe element is moved by an amount predetermined by the actuating surface (55), and that the encoding detection device (5) includes a motion sensor (17; 57), ~~for example, a switch,~~ for detecting the movement of the probe element.

12(currently amended). The handle section as claimed in claim 10, ~~characterized in that~~ wherein the probe element is formed by a drive shaft (28) mounted to be ~~preferably in~~ longitudinally displaceable ~~fashion~~.

13(cancelled). The handle section as claimed in claim 11, **characterized in that** the motion sensor is a probe element (57), for example, a switch, according to claim 8 or 9.

14(previously amended). The handle section as claimed in claim 3, wherein the encoding detection device (5) includes a signal receiver (20) for receiving an encoded signal from the brushing or cleaning tool (2), more specifically from the interlock canceling element (7), and/or a signal transmitter (20) for transmitting a signal, particularly an interrogation or

activation signal, to the coupled brushing or cleaning tool (2), more specifically the interlock canceling element (7).

15(currently amended). The handle section as claimed in claim 3 1, ~~characterized in that~~ wherein the encoding detection device (5) includes an optical sensor (12; 13; 15) for detecting an optical signal encoding of the respective coupled brushing or cleaning tool (2) attached, particularly the interlock canceling element (7).

16(currently amended). The handle section as claimed in claim 3 1, ~~characterized in that~~ wherein the encoding detection device (5) includes a magnetic sensor (6; 9; 10) for detecting a magnetic signal encoding of the respective coupled brushing or cleaning tool (2) attached, particularly the interlock canceling element (7).

17(previously amended). The handle section as claimed in claim 3, wherein the encoding detection device (5) includes a sensor (9), more specifically a circuit, for detecting a metallic and/or electromagnetic encoding of the brushing or cleaning tool (2) coupled, more specifically the interlock canceling element (7).

18(currently amended). The handle section as claimed in claim 3 1, ~~characterized in that~~ wherein the encoding detection device (5) includes a capacitive sensor (21) for detecting a capacitive signal encoding of the respective coupled brushing or cleaning tool (2) attached, particularly the interlock canceling element (7).

19(currently amended). The handle section as claimed in claim 3 1, ~~characterized in that~~ wherein the encoding detection device (5) includes an electrical sensor for detecting an electrical signal encoding of the respective coupled brushing or

cleaning tool (2) ~~attached, particularly the interlock canceling element (7).~~

20(previously amended). The handle section as claimed in claim 3, wherein the encoding detection device (5) is arranged in a closed, fluid-tight handle housing (26).

21(previously amended). The handle section according to claim 1, wherein the interlock canceling element (7) for deactivation of the interlock device (100) of the handle section (1) is fastened to or in a handle housing (26).

22(currently amended). The handle section as claimed in claim 21, ~~characterized in that~~ wherein a drive shaft (28) of the handle section (1) functions ~~is provided~~ as the interlock canceling element (7) via ~~as by~~ magnetization.

23(previously amended). A brushing or cleaning tool with a housing, a coupling section extending from the housing to effect coupling to a handle section (1) of an electric dental cleaning device, and an interlock canceling element (7) secured directly or indirectly to the housing for deactivation of an interlock device (100) of the handle section (1), the interlock device (100), when activated, disabling the electric dental cleaning device from operating in a cleaning manner, such that when the brushing or cleaning tool is coupled to the handle section, the interlock cancelling element (7) is responsive to a first signal received from the handle section to return a second signal to the interlock device (100) of the handle section.

24(previously amended). A brushing or cleaning tool, with a coupling section to effect coupling to a handle section (1) of an electric dental cleaning device, and an interlock cancelling element (7) for deactivation of an interlock device (100) of the handle section (1), wherein the interlock canceling element (7) includes an encoding device or member having a magnetic,

electrical, capacitive, electromagnetic, optical and/or mechanical encoding function or property.

25(previously amended). A brush or cleaning tool, with a coupling section to effect coupling to a handle section (1) of an electric dental cleaning device, and an interlock cancelling element (7) for deactivation of an interlock device (100) of the handle section (1), wherein the interlock canceling element includes a signal receiver for receiving a signal from the handle section (1) and/or a signal transmitter for transmitting an interlock deactivating signal to the handle section (1).

26(previously amended). The brush or cleaning tool as claimed in claim 25, wherein the signal receiver and/or the signal transmitter, in the form of one or more metal coils (44, 45), have encoding elements for encoding a received signal.

27(previously amended). A brushing or cleaning tool, with a coupling section to effect coupling to a handle section (1) of an electric dental cleaning device, and an interlock cancelling element (7) for deactivation of an interlock device (100) of the handle section (1), wherein the interlock canceling element possesses an encoding body which is fixedly connected to a body of the cleaning tool and configured so as to be positioned in the range of detection of an encoding detection device (5) of the handle section (1) when the cleaning tool (2) and the handle section (1) are in a coupled condition.

28(currently amended). The brush or cleaning tool as claimed in claim 23, ~~characterized in that~~ wherein ~~provision is made for~~ at least one actuating section functions as the interlock canceling element, which on coupling of the brushing or cleaning tool (2) to the handle section (1) actuates a probe element (28) or a sensing element (17; 57) on the handle section (1), ~~particularly by moving and/or deforming~~ the probe element

(28) or sensing element (17; 57) ~~it~~ by a predetermined degree and/or in a predetermined direction and/or exerting a predetermined force thereon.

29(currently amended). The brush or cleaning tool as claimed in claim 23, ~~characterized in that~~ wherein as an actuating section with an actuating surface (55) is provided, ~~in particular the actuating surface being~~ a pressure application surface, or an abutment ~~or the like,~~ which registers with a corresponding engagement surface (56) or mating abutment associated with the probe element (28) or sensing element of the handle section (1) in such manner that on coupling of the brushing or cleaning tool (2) to the handle section the engagement surface (56) or mating abutment on the handle section is moved by a predetermined amount and/or in a predetermined direction and/or is acted upon by a predetermined force.

30(currently amended). The brush or cleaning tool as claimed in claim 23, ~~characterized in that~~ wherein the interlock canceling element (7) is configured in such manner that preferably a section of a drive shaft (49) in the brushing or cleaning tool cooperates with a drive shaft (28) of the handle section (1).

31(currently amended). The brush or cleaning tool as claimed in claim 23, ~~characterized in that~~ wherein the interlock canceling element (7) includes at least one magnetic field effecting member or encoding body (8) which is arranged preferably in the area of a coupling end of the brushing or cleaning tool (2).

32(currently amended). The brush or cleaning tool as claimed in claim 23, wherein the interlock canceling element (7) includes at least one dielectrically acting member or encoding body (8) which is arranged preferably in the area of a coupling

end of the brushing or cleaning tool (2), ~~being constructed to protrude beyond the end in particular in the direction of the coupling motion.~~

33(currently amended). The brush or cleaning tool as claimed in claim 23, wherein the interlock canceling element (7) includes an optical waveguide (37) communicating with a light entrance opening (38) and a light exit opening (39) provided preferably in the coupling end of the body of the brushing or cleaning tool.

34(previously amended). The cleaning tool as claimed in claim 23, wherein the interlock canceling element (7) is an integral part of a body of the cleaning tool.

35(previously amended). The cleaning tool as claimed in claim 23, wherein the interlock canceling element (7) is releasably connected to a body of the cleaning tool.

36(currently amended). The brush or cleaning tool as claimed in claims 33, wherein the interlock canceling element (7) is integrated in a ring (8) arranged at a coupling end of the cleaning tool, being in particular snap-fittable to ~~the~~ a body of the cleaning tool by positive engagement therewith.

37(currently amended). An electric dental cleaning device, ~~in particular toothbrush~~, with a the handle section (1) in combination with a the brushing or cleaning tool (2) adapted to be coupled thereto, each according to claim 1.

38(currently amended). An electric dental cleaning device, ~~in particular toothbrush~~, with a the handle section (1) according to claim 1 in combination with a the brushing or cleaning tool (2) adapted to be coupled thereto, said tool being compatible with the handle section (1) but having no interlock canceling element (7).

39(new). The brushing or cleaning tool as claimed in claim 25, wherein the interlock cancelling element (7) comprises a smart transponder chip (19).